

REMARKS

In an Office Action mailed on July 13, objections were made to the specification; objections were made to claims 31 and 37-42; claims 44 and 45 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement; claims 43, 44, 49 and 50 were rejected under 35 U.S.C. § 102(e) as being anticipated by Simpson; claims 45-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Simpson; and claims 25-27 and 32-36 were allowed. The objections and §§ 102, 103 and 112 rejections are addressed below.

Objections to the Specification:

The Examiner objects to the specification because it is purportedly "unclear what the term 'bow' means." Office Action, 2. In support of the objection, the Examiner contends that the disclosure separately references springs as an embodiment and also states that Figs. 5A and 5B do not depict a conventional bow shape.

Applicant requests withdrawal of the objections to the specification for at least the reason that the meaning of "bow" in the specification would be apparent to one of ordinary skill in the art. More specifically, one of ordinary skill in the art would assume that "bow" means "something bent into a simple curve." *Merriam-Webster's Collegiate Dictionary, 10th Edition* (Merriam-Webster, Inc.), p. 136 (Exhibit A).

The specification is consistent with the customary and ordinary meaning of "bow." In this regard, the specification states that the bow 30 may elastically deform and store mechanical energy (Specification, paragraph no. 34), which is consistent with "something that is bent into a simple curve."

Applicant is unclear as to why the specification's description of a spring changes the meaning of "bow." In this regard, one of ordinary skill in the art would recognize a bow could be a "bow spring," in that a "bow spring," could be elastically deformable and store energy.

The depiction of the bow spring 30 in Figs. 5A and 5B is also consistent with the ordinary and customary meaning of "bow." In this regard, there is no language in the specification, which labels Figs. 5A and 5B as showing the bow 30 in its entirety. To the contrary, one of ordinary skill in the art would recognize that Figs. 5A and 5B depict the end sections of the bow 30. As the depicted sections are curved, the depictions are consistent with the ordinary and customary meaning of "bow."

Thus, for at least the reason that the meaning of bow is clear from the figures, specification and its ordinary and customary meaning, are set forth above, withdrawal of the objection to the specification is respectfully requested.

Objections to Claims 31 and 37-42:

The Examiner objects to claims 31 and 37-42 due to the use of the term "bow" for the same reasons given for the objection to the specification. Applicant refers to the discussion above and for similar reasons requests withdrawal of the objections to these claims. In particular, the specification describes at least one embodiment of a "bow," an entity that one of ordinary skill in the art would recognize is something that is bent into a simple curve. Nothing in the specification is inconsistent with the ordinary and customary meaning of "bow." Furthermore, the depiction of the bow 30 in Figs. 5A and 5B is entirely consistent with the curved shape of a bow.

§ 112 Rejections:

Claims 44 and 45 were rejected under 35 U.S.C. § 112, first paragraph for purportedly failing to comply with the enablement requirement. In particular, the Examiner states, "it is unclear how a metallic substrate or composite material is held in a first position to store potential energy and then released, in order to release some of the potential energy." Office Action, 3. The Examiner also states, "it is unclear what mechanism holds the metallic substrate or composite material in a first position." *Id.*

Paragraph 29 of the specification describes at least two ways to hold a metallic substrate or composite material in a first position to store potential energy so that the material may then be released. In this manner, paragraph 29 describes energizing a seal element 20, which includes a spring 26. Spring 26, as described in the specification, is "wound tightly and held in place by a pin or weld." Additionally, the specification states, "once seal element 10 is in the proper position, spring 26 may be released to uncoil and expand, thereby providing a radially energizing action against seal layer 16." Specification, 29.

Thus, the above-referenced language of the specification describes a spring that is held tightly in place by a pin or weld. One of ordinary skill in the art would recognize that a pin could hold the spring 26, should the spring 26 be made of either a composite or metal material.

Additionally, one of ordinary skill in the art would recognize that a weld could hold the spring 26 in place should the spring 26 be made of a metallic material.

The burden is on the Examiner to set forth a *prima facie* case of lack of enablement. In other words, "the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention." *In re Wright*, 99 F2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); M.P.E.P. § 2164.04. Thus, the Examiner must provide specific reasons why the specification's disclosure of a pin or weld to hold the spring 26 fails to enable claims 44 and 45. Otherwise, Applicant requests withdrawal of the § 112, first paragraph rejections of claims 44 and 45.

§§ 102 and 103 Rejections of Claims 43-50:

The seal element of independent claim 43 includes an energizing element that is adapted to store potential energy prior to a packer being run into a predetermined position in a well. A mechanism of the seal element is adapted to release the energizing element downhole in the well to release at least some of the potential energy at a predetermined position. The method of independent claim 49 recites storing potential energy in a seal element of a packer before deploying the packer downhole in a well and setting the packer in the well by releasing at least some of the potential energy to form a seal between the packer and a wall that surround the packer.

Contrary to the limitations of independent claims 43 and 49, Simpson merely discloses a packer which includes an expandable slotted tubing 62. The initial state of this packer is depicted in Fig. 6 of Simpson. When the packer 60 is in the appropriate position downhole, Simpson describes that a ratchet ring 71 (the alleged mechanism of claims 43 and 49) compresses the tubing 62 to radially expand the packer 60 and form the seal. However, the packer 60 fails to teach or even suggest either the seal element of independent claim 43 or the method of independent claim 49.

More specifically, the Examiner contends that the ratchet ring 71 purportedly holds an energizing element in a first position prior to a packer being run into the well to store potential energy so that this energy may be released downhole in the well. Applicant requests a specific citation to Simpson that shows this alleged operation of the packer 60. In this regard, although the ratchet ring 71 may arguably have the potential of energizing the slotted tubing 62 once the

tubing is in position for the packer 60 to be set, there is no teaching or suggestion in Simpson that potential energy is stored in the packer 60 before the packer 60 is run downhole. Thus, the potential for energization is not the same as the storing and releasing of potential energy, as would be appreciated by one of ordinary skill in the art.

The Office Action states that the missing claim limitations are somehow inherent in Simpson. Office Action, 6. However, for a missing claim limitation to be inherent in a reference, the missing claim limitation must *necessarily flow* from the reference. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). In contrast to the missing claim limitations necessarily flowing from Simpson, Simpson teaches the alternative: the energization of a slotted tubing 62 by a ratchet ring 71, after a packer 60 is run downhole and is in position to be set. Thus, there is no implicit, explicit or inherent teaching of Simpson relating to storing potential energy in its packer before the packer is run downhole and the subsequent release of this energy to set the packer.

Therefore, for at least the reasons that are set forth above, Applicant requests withdrawal of the § 102 rejections of claims 43 and 49.

Claims 44-48 and 50 overcome the §§ 102 and 103 rejections for at least the reason that these claims depend from an allowable claim.

Claims 45-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Simpson, and in this rejection, the Examiner concludes that it would be within the ordinary skill of the art to select a material, (i.e., the composite material of claim 45) as a matter of design choice. However, a *prima facie* case of obviousness requires more than speculation by the Examiner. In this regard, a *prima facie* case of obviousness requires the Examiner to show a suggestion or motivation in the art for the modification, which would be in this case, modifying Simpson so that the slotted tube 42 is replaced by composite material. It is not entirely clear that such a modification would be even possible, in that the Examiner has failed to show where the prior art discloses a composite material that could replace the function of the slotted tube 62. A *prima facie* case of obviousness must be based on objective evidence. *In re Lee*, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002); M.P.E.P. § 2143. Therefore, for at least the reasons that are set forth above, a *prima facie* case of obviousness has not been set forth for claim 45; and for at least this reason, Applicant requests withdrawal of the § 103 rejections of this claim.

For similar reasons, *prima facie* cases of obviousness have not been set forth for claims 46 and 47. In this regard, the Examiner fails to show where the prior art contains the alleged suggestion or motivation to replace the ratchet ring 71 of Simpson (i.e., the alleged mechanism) with a pin. In this regard, it is not entirely clear how Simpson's packer 60 would even function by replacing the ratchet ring 71 with a pin. Likewise, modifying Simpson's packer 60 so that its ratchet ring 71 is replaced with a spring (claim 47) also does not appear to be feasible, as it is unclear how Simpson's packer 60 would operate with a spring in place of the ratchet mechanism 71.

To the extent the Examiner is taking Official Notice for the alleged suggestion or motivation to modify Simpson's packer 60 to substitute the alleged mechanism (i.e., the ratchet ring 71) with a pin or spring, Applicant challenges the Official Notice and requests a reference to support the Examiner position. M.P.E.P. § 2144.03. It is noted that such a suggestion or motivation must be "capable of instant and unquestionable demonstration as being well-known" in order for it to be appropriate to the subject of Official Notice. M.P.E.P. § 2144.03.A.

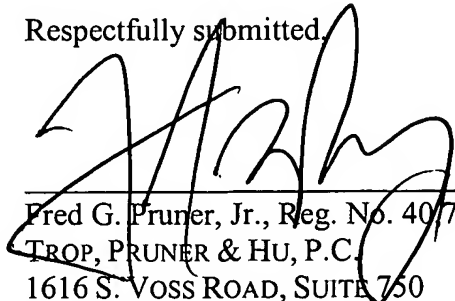
Thus, for at least the reasons that are set forth above, withdrawal of the §§ 102 and 103 rejections of claims 43-50 is requested.

CONCLUSION

In view of the foregoing, withdrawal of the §§ 102, 103 and 112 rejections and a favorable action in the form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (SHL.0268US).

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Respectfully submitted,



Fred G. Pruner, Jr., Reg. No. 40779
TROP, PRUNER & HU, P.C.
1616 S. VOSS ROAD, SUITE 750
HOUSTON, TEXAS 77057
713/468-8880 [Phone]
713/468-8883 [Fax]